

WHAT IS CLAIMED IS:

1. A gas discharge display panel having a structure including transparent electrodes arranged on the inner surface of one of substrates  
5 and a non-colored glass layer between a discharge space and the transparent electrodes, wherein the display panel has a colored glass layer that includes crystallization glass containing coloring agent and contacts the non-colored glass layer.
2. The gas discharge display panel according to claim 1, wherein  
10 the colored glass layer contacts both the transparent electrode and the non-colored glass layer.
3. The gas discharge display panel according to claim 1, wherein the colored glass layer is a light shielding layer containing the coloring agent selected from the group of iron monoxide, dichrome trioxide,  
15 copper monoxide, nickel oxide, cobalt oxide and manganese dioxide.
4. The gas discharge display panel according to claim 1, wherein the colored glass layer is a reflecting layer containing the coloring agent selected from the group of titanium dioxide, aluminum oxide, silicon dioxide, barium sulfate, barium titanate, and mica isinglass.
- 20 5. The gas discharge display panel according to claim 1, wherein the colored glass layer is a filtering layer containing the coloring agent selected from the group of chromium oxide and cobalt oxide.
6. A process for manufacturing a display panel having a non-colored glass layer and a colored glass layer that contacts the non-colored  
25 glass layer, the process comprising the steps of:  
forming a multilayer structure that includes a colored paste layer in which crystallization glass that is crystallized at the temperature TA and coloring agent are diffused and includes a non-colored paste layer in which glass powder having softening point that is the temperature TB  
30 higher than the temperature TA are diffused; and

heating and burning the multilayer structure to the temperature TC that is higher than the temperature TB and is lower than the softening point of the crystallization glass powder after the crystallization, so as to form the non-colored glass layer and colored glass layer simultaneously.

5           7. The process according to claim 6, wherein the step of heating and burning the multilayer structure includes the step of setting the temperature gradient of the crystallization temperature range from the temperature lower than the temperature TA to the temperature TA smaller than the temperature gradient of the temperature range from the  
10 temperature TB to the temperature TC.

8. The process according to claim 6, wherein the temperature difference between the temperature TB and the temperature TC is set to a value more than 50 degrees centigrade.

9. The process according to claim 6, wherein the crystallization  
15 glass powder has a softening point that is higher than the temperature TB after the crystallization by 100 degrees centigrade or more.